

SOURCE INVENTORY

CATEGORY # 52

LAND FARMING

1999 EMISSIONS

Introduction

Land farming is a process in which waste, primarily from dried sewage sludge, is deposited and spread on rural, open lands. Most of the sludge has decomposed to the point where there is very little VOC. In the grape growing regions within the District, pumice (grape skin, seed, and stem remnants after crushing) is usually placed on the soil in the Fall. Tilling may be done in the Spring, however, it is thought any ethanol emissions from this source would be insignificant.

Methodology

The amount of waste has been estimated to be 37,469 tons from land farming operations in 1999. Various Bay Area sanitation districts provided this estimate. This category is treated as an area source. After discussions with county and University of California agricultural personnel, a TOG emission factor was estimated at 2.0 lbs. per ton of waste. Emissions were then calculated by multiplying the emission factor to the amount of waste.

Monthly Variation

For monthly variation, the emissions are distributed evenly throughout the year.

County Distribution

Emissions are attributed to Alameda, Contra Costa, Napa, and Sonoma Counties.

TRENDS

History

Until the early 1990's, landfarming consisted of wastes more from the industrial sector. Most of these industrial wastes are now transported outside the District to be spread on the land. Prior to 1990, the growth was based on the Association of Bay Area Governments' (ABAG) Manufacturing Employment growth profile. Between 1990 and 1993 growth was based on the estimated waste throughputs.

Growth

Emissions after 1993 are assumed to grow at a rate similar to the population as provided by ABAG's Population growth profile.